
A geological excursion guide to Rum

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(Key)

Key

(Key for figures 6, 10, 12, 19, 26, 33, 44, 45, 51, 58, 62 and 71. For scale, see kilometre grid. All heights are in feet.)

PALEOCENE

Canna Lava Formation (Post Rum Central Complex)

- AW*** Orval Member: hawaiite, basaltic hawaiite, commonly feldsparphyric
- A¹** Guirdi Member: tholeiitic andesite
- A²** Upper Fionnra Member: basaltic andesite (with feldsparphyric basaltic andesite)
- UB** Lower Fionnra Member: olivine-basalt, olivine-basaltic hawaiite
- CG** Fluvialite conglomerate (interbedded with above)

Eigg Lava Formation (Pre-Rum Central Complex)

- BF** Basalt (commonly crushed)

RUM CENTRAL COMPLEX

Stage 2: (Layered Centre)

- E¹** Gabbro and olivine-gabbro
- E²** Dytonite-gabbro (Eucrite)
- E³** Dytonite-troctolite (Allivaltite, E³, where intrusive (includes gabbroic facies))
- U** Peridotite and feldspathic peridotite
- U-U** Feldspathic peridotite breccias (ultrabasic inclusions in a feldspathic peridotite matrix)
- AU** Peridotite breccias (ultrabasic inclusions in a peridotite matrix)

Subscript letters and numbers against rocks in the Layered Centre:

Central Intrusion:
 L, Long Loch member
 R, Ruimsival member
 D, Domnabac member

Western Layered Intrusion:
 A, Ard Mheall member
 T, Transitional member
 H, Harris Bay member

Eastern Layered Intrusion
 1-16, units of the layered sequence, numbered from 1 at the base.

Stage 1: Pre-Layered Centre: Intrusive rocks

- G** Microgranite, commonly granophyric (G where fine grained)
- R^A** Porphyritic rhyodacite, commonly flow-banded
- X** Tuffite, intrusive breccia
- F^M** Microgranodiorite, quartz-microdiorite
- I** Intrusion breccia (gabbro, dolerite and rare peridotite blocks in an intrusive microgranitic matrix)
- A + A** Am Mhà Breccias (gneiss, gabbro and sandstone blocks in an intrusive microgranodioritic matrix)

Stage 1: Pre-Layered Centre: extrusive and sedimentary rocks

- R²** Porphyritic rhyodacite, commonly with eulastic texture
- WZ** Megabreccia (Torridon Group rock fragments up to 500m diameter)
- Z** Coarse breccia, weakly bedded (subscript letters indicate the dominant clast type: L, Lewisian gneiss; T, Torridon Group sandstone; J, pale coloured Jurassic sandstone, sandstones commonly found at top of sequence (Epiostasic Sandstone); Z^{1A})

Other intrusive rocks of Paleocene age

- U*** Peridotite and feldspathic peridotite of plugs and dykes (U¹ dunite)
- B** Basalt and dolerite (D) dykes, sills and inclined sheets (B, D, feldsparphyric basalt or dolerite, B¹, D¹, picrite basalt or dolerite)
- K** Unclassified basic sheets and dykes
- hX** Fissure breccias
- UB** Pitchstone dykes

MESOZOIC

LOWER JURASSIC

- BFB¹** Sandstone
- BFB²** Limestone
- BFB³** Mudstone
- S** Calc-silicate rocks. Formed by thermal metamorphism of Lower Jurassic limestone during the Paleocene

Broadford Beds

TRIASSIC

Monadh Dubh Sandstone Formation

- IMDS** Sandstone, conglomerate and sedimentary breccia
- IMDS** Cornstone

PRECAMBRIAN

PROTEROZOIC (Torridon Group)

Aultbea Formation

- TCSM** Spór Mhòr Member: fine-grained sandstone, siltstone

Applecross Formation

- TCAS** Screort Sandstone Member: medium- and fine-grained sandstone with exotic pebbles
- TCAM** All Mhòr na h-Uamha Member: interbedded fine-grained sandstone and siltstone

Diabalg Formation

- TCDL** Laimhig Shale Member: intercalated mudstone-siltstone and fine-grained sandstone
- TCDF** Fiachais Gritty Sandstone Member: coarse-grained sandstone, local sedimentary breccias

ARCHEAN (Lewisian Gneiss Complex)

- F** Feldspathic gneiss with amphibolite layers (commonly with Paleocene thermal metamorphic overprint)

Topographical Symbols

- Road
- Track
- Path
- Old wall
- Fence
- Pipeline
- Cliff, flat rock and shingle
- Contour interval (25 ft)
- Loch
- River

OTHER FEATURES

Geological Symbols

- δ Dip of strata, (in degrees)
- δ Vertical strata
- δ Dip of layering or flow-structures in intrusive igneous rocks and of welding foliation in extrusive igneous rocks, (in degrees)
- δ Vertical layering, flow structures and welding foliation
- δ Dip of foliation in gneiss, (in degrees)
- δ Vertical foliation in gneiss
- δ Dip of inclined basic sheets, (in degrees)
- Geological boundary
- Geological boundary where uncertain or gradual
- Fault
- Line of structural weakness
- Benches and escarpments

(Key) Key for (Figure 6), (Figure 10), (Figure 12), (Figure 19), (Figure 26), (Figure 33), (Figure 44), (Figure 45), (Figure 51), (Figure 58), (Figure 62) and (Figure 71). For scale, see kilometre grid. All heights are in feet.) Key based on RUM – Solid Geology (© Scottish Natural Heritage 1992). Reproduced with the permission of the Scottish Natural Heritage. All rights reserved.